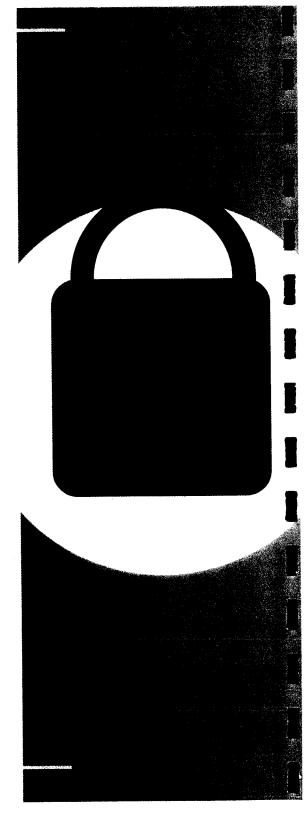
CHAPTER 5

Internet Security, Consumer Awareness, and Viruses

Chapter Overview and Related Terms

When surfing the Internet, you have to be aware that your identity is surfing with you. Your every movement can be tracked by a number of net watchers. This may seem a little strange, but it is to your best advantage IF you know how to protect yourself and realize potential scams. This chapter will give you the information you need to understand potential problems and how to handle certain situations. You, and you alone, are the only person who can protect yourself while on-line. There are a few simple things to know to protect your identity and personal information. By

the end of this chapter, you will know how to protect your confidential information, how to avoid others taking advantage of you, and how to keep your computer free from harmful viruses. The following are terms with which you should become familiar before proceeding.





 ${\sf R}$

V

Terms

- Cookies Small data structures that store information about where you have been on the Internet, personal information you have contributed on the Internet, and even the duration of how long you have been on a site. Cookies are designed to help in your surfing experience, but you have to be careful about what information you give out on the Internet.
- Virus A virus is a tiny computer program that is intended to cause some form of destruction on a computer. Viruses are usually spread via e-mail attachments.
- SSL (Secure Socket Layer) SSL is a protocol that helps keep messages sent over the Internet private. It is used to make sure that information you send, such as credit card numbers, is encrypted.
- Encryption This is the coding or scrambling of information in a file so that it can only be decoded and read by someone who has the correct decoding key. Encryption is commonly used in e-mail and other data transferring so that if someone were to intercept the message or data, they would not be able to read it.
- E-Commerce Electronic Commerce is the idea of conducting business over the Internet.



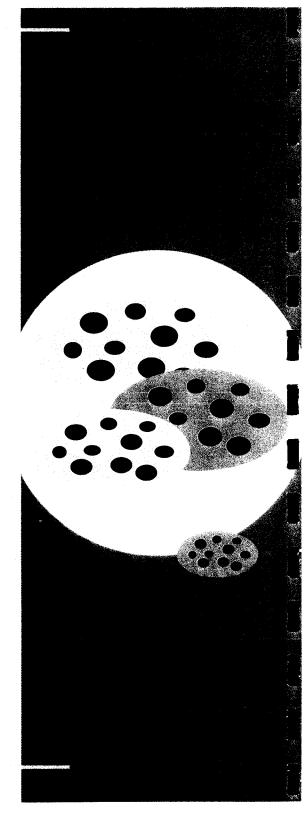
Cookies

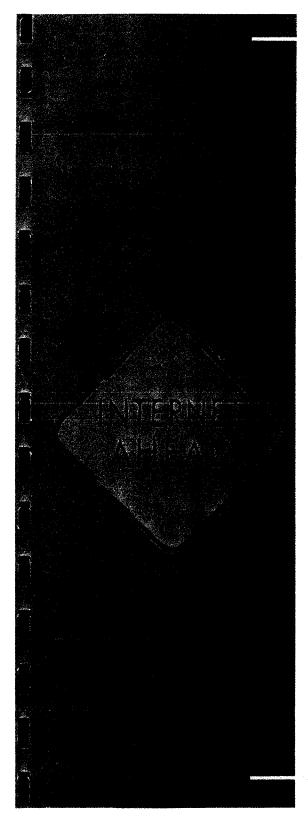
What are cookies? They aren't the warm and gooey kind with chocolate chips. A cookie is a small data file that certain web sites write to your hard drive when you visit them. A cookie file can contain information such as a user ID that the site uses to track the pages you've visited. But the only personal information a cookie can contain is information you supply. Generally, cookies work by assigning a unique number to the user that has no meaning outside the assigning site. A cookie can't read data off your hard disk or read cookie files created by other sites. This random number lets web sites keep track of "how many" times customers are doing specific things - like visiting their site each month - without really knowing who those customers are. Cookies allow for "state information" to be stored and make your web surfing experience more user friendly and much faster. For example: Rick surfs around a web site that allows users to view

articles on Internet security for a small charge. Cookies can be used to store information about which articles he has viewed (that is, a list of URLs) so that he can pay for them all at once rather than each time he downloads an article.

Carl fills out a web form with his name, address, and other information. Cookies can be used to store this information so that the next time Carl visits the site, the information is automatically uploaded and he doesn't have to provide it again. This is a useful aspect of cookies, but you have to remember, if you are giving out personal information like credit card numbers, the information needs to be transmitted over a secure socket layer.

Secure Socket Layers are a way for sensitive information to be transmitted on the Internet in a confidential manner. SSL uses encryption to secure your information. If a site doesn't have SSL, don't give out your personal information. When you are about to buy something over the Internet, check to see if a site uses SSL. You can do this by locating the site's "Security and Privacy" page. Usually you will see a link to this page at the bottom of the web site.





In this statement, you will find how the site is secured and how your transactions and personal information are kept secret. If the company uses encryption and secure socket layers, you know that doing business with them is more secure. If they don't offer these services, then you should consider doing business with another company.

Internet Fraud and How to Avoid It

The term "Internet fraud" refers generally to any type of fraud scheme that uses one or more components of the Internet, such as chat rooms, e-mail, message boards, or web sites. People use these components to present fraudulent solicitations to prospective victims, to conduct fraudulent transactions, or to transmit the proceeds of fraud to financial institutions or to others connected with the scheme. Basically, these people use the Internet to take your money, solicit you, and rip off companies. Later on in the chapter we will discuss, in

detail, many of the common Internet common Internet fraud schemes and how to recognize them. It is essential to know how to protect yourself from these schemes while you are on-line.

Protect Yourself and Your Identity

The easiest way to protect yourself and your identity on-line is to not give out sensitive information over the Internet. If information about your identity is on the Internet, it can be used and seen by other people. If it isn't there, no one can use it for inappropriate reasons.

Another way to protect yourself is to know with whom you are talking. If you are ordering something on-line and the company is a well-known business, you shouldn't have any concerns about your information being used for the wrong reasons. BUT, if you are buying something from a company about which you have no information, it is probably a good idea to do some research on it.

Also, never give out information over email if you do not know who is going to receive the message. Sometimes criminals pretend to be systems administrators or your Internet Service Provider asking for confidential information. Unless you know who the administrator is, DO NOT give out your information. By following these simple rules, you can protect yourself and your identity on-line from those who want to use it for all the wrong reasons.

Protect Yourself from the DOT CON's

The Internet has allowed individuals to buy and sell goods from the comfort of their own home. It has allowed us to simplify our lives and simplify our buying needs. With this new form of consumer spending, the door has been opened for con artists as well. These people concern themselves with taking your money and doing it in a way that leaves you wondering what has actually happened. These individuals or companies can be

classified as DOT CON's. We have put together a listing of the types of scams that we classify

as dot con's to protect you and to give you an idea of how to recognize potential scams. In this list you will find complaints from individuals, how the company or individual does what they do, and ways of making sure that this doesn't happen to you.

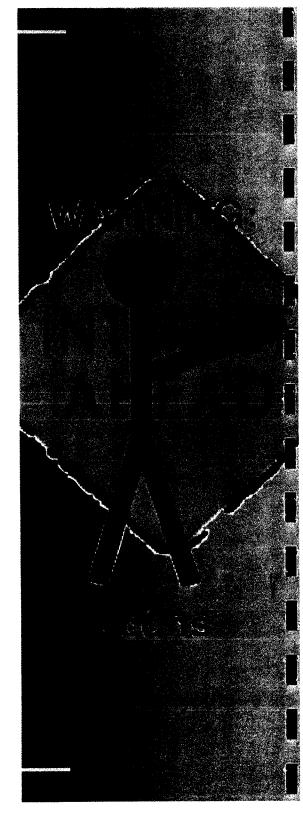
Internet Auctions - Buying items online for a price that is determined by bidding. You can find almost anything you are looking for and usually at a very reasonable price.

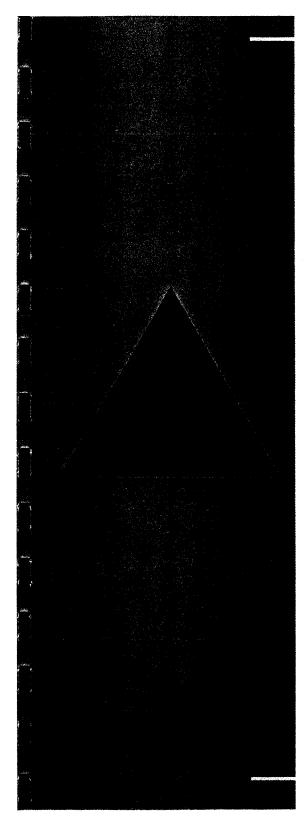
Complaints - After sending in money for the item, some people find that the product delivered is less than satisfactory or worse, never delivered.

Protect Yourself - Find out information about the person selling the item. See if anyone has done business with him/her.

Internet Access Services - Companies offer you money for simply cashing a check.

Complaints - Individuals are informed of a long-term contract for Internet access and face large penalties for termination of the contract.





Protect Yourself - Make sure that you read all of the terms and conditions before cashing the check. Continuously monitor your phone bill to see if any unexpected charges appear.

Credit Card Fraud - A site will ask you to prove that you are over 18 years of age by providing your credit card number. A site will allow you to view images for free over the Internet if you provide your credit card number and conduct business on a non-secure web site.

Complaints - Individuals notice a large amount of products or services purchased with their credit card.

Protect Yourself - Only purchase items on-line from companies that you trust or through sites that offer SSL. If you notice fraudulent purchases on your credit card, raise questions with your credit card company about these purchases. You are only liable for up to \$50 if you report these incidents in a timely manner.

Web Cramming - Companies offer a free, custom made web site for a 30-day trial period with no obligation to continue.

Complaints - Individuals say that they have been charged for services on their telephone bill, even when they extended the offer past the 30-day trial period.

Protect Yourself - Always monitor your phone bill to see if any charges are fraudulent.

Multi-level Marketing Plan/Pyramids
- If you sell products or services over the Internet you make money. You also can make money off of the people who you recruit to sell items and services.

Complaints - Individuals buy into plans or agreements and find out that they are selling to distributors. In the program there is no way to make money off of a distributor. These types of pyramid schemes are illegal.

Protect Yourself - Do not enter into any contract without knowing the full details. It is best to stay away from any type of pyramid scheme. If you do participate in a marketing plan, avoid plans that require you to recruit or make you invest in expensive inventory, or plans that require you to have a minimum inventory level.

Business Opportunities - These are opportunities where you can be your own boss and make lots of money.

Complaints - Individuals are drawn to the opportunity of making big bucks and invest in the "business opportunity" which turns out to be a "business flop." There ends up being no evidence of the actual earnings.

Protect Yourself - Talk with people who have started in these business opportunities and find out the conditions. Get all promises in writing and let an attorney look at them before entering into any contract.

Investment Opportunities - Make an intial investment into a day-trading system and from here all you have to do is watch your money grow and reap all the gains.

Complaints - Any time you talk about big gains you are also talking about big risk. These companies say that they can predict the market with 100% accuracy. Individuals end up losing a lot of money because of bad investing.

Protect Yourself - Check out the promoter with the state Attorney General's office and also talk with individuals who have invested in the company. Your best choice is to invest with someone who has knowledge about the market, not a promoter of high returns.

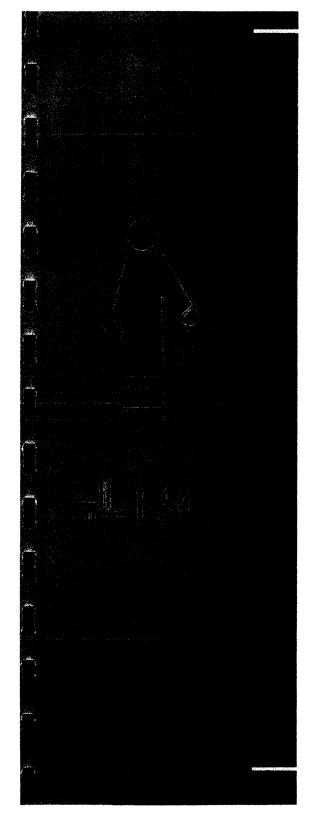
Health Care Products/Services - Companies sell products that are guaranteed to cure serious, even fatal health problems.

Complaints - Claims about these "miracle" products suggest that an individual's condition can be cured. The problem is, people who invest in these "miracle" products for serious illnesses potentially delay getting much needed help.

Protect Yourself - Consult a health-care expert about any and all products that claim to be a "cure-all" product. It is best to stick with the advice of a doctor.







A List of Contacts for all of Your Problems Related to Scams

There are a number of organizations that you should contact if you believe that you are the victim in a computer-related scam. In order to protect your rights and the rights of others, you should always report any misuse of your information. You must realize that some people will take advantage of you. If you are not watching carefully, you could become the victim of a scam. Here is a helpful list of organizations to contact if you believe you were part of a scam.

-www.ifccfbi.gov (Internet Fraud Complaint Center) - This is the site that addresses several Internet fraud issues. It has an area to make a complaint, read up on the current trends within Internet schemes, and also to find information on what the FBI is doing to help fight Internet crime.

-www.ftc.gov (Federal Trade Commission) - Find lots of information about protecting your identity, about scams, how to keep your children's identity safe on the Internet, plus other information on Internet related issues.

-www.state.ia.us/government/ag (Iowa Attorney General's office) - Find information about scams related to Iowa. These scams focus on many different areas including the Internet and E-Commerce.

These sites allow you to file a complaint on-line. Other sites include:

-www.BBBonline.org - You can submit a complaint about a company or check to see if a company is a member of the Better Business Bureau before you buy an item from them. This site can be very helpful to you.

Computer Viruses

Computer Viruses are another form of crime on the Internet. Viruses are usually transmitted via e-mail and cause harm to your computer. Viruses can be especially harmful to businesses and can even cause a business to shut down until the problems have been fixed. In the year 2000, it is estimated that computer viruses cost business and individuals around \$17.1 billion. It is crucial to understand what computer viruses are capable of doing and how to spot one. Further reading will help you do this.

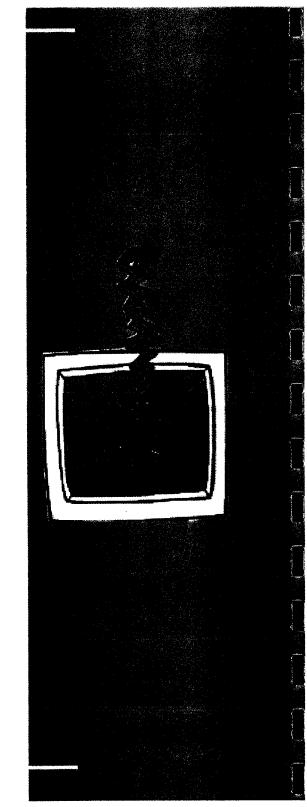
What is a Computer Virus?

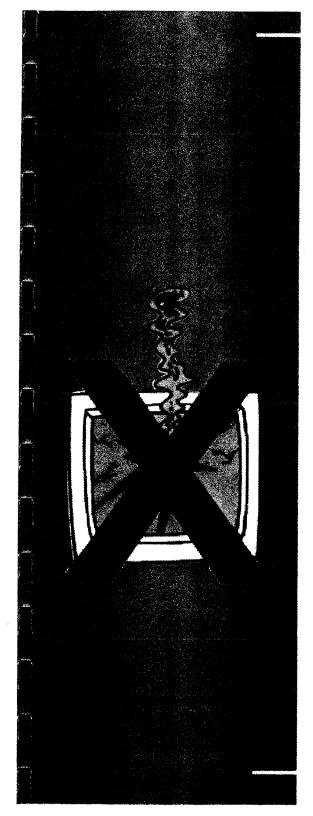
A computer virus is a tiny program, usually transmitted via e-mail that causes damage to the computers that it infects. Why is it called a virus? A computer virus is like a human virus in that it is not living. Both computer viruses and human viruses

require piggybacking some other computer program or cell

in order to replicate. A computer virus is usually a program written in a language that can be found on the computer. Once the user opens the file where the virus is contained, the computer simply runs the file and the computer becomes infected.

Examples of viruses include the I LOVE YOU virus and the Melissa virus. The I LOVE YOU virus was a simple line of code disguised as an e-mail attachment. When the user double-clicked on the attachment, the virus was executed and sent itself to all of the individuals listed in the user's address book and started corrupting files on the user's computer. The Melissa virus was even more significant than the I LOVE YOU virus. The Melissa virus was created as part of a Microsoft Word document. The file was delivered over e-mail and would contain a nice little note. The virus would then send itself to the first 50 people in the user's address book. The note that was sent with the virus would actually look like it was from the user, so no one expected it to be a virus. Computer viruses can be should tricky, and you very





never open an e-mail attachment that looks suspicious. Never open an e-mail attachment that has the extension .EXE.

How to Protect Yourself from Computer Viruses

If your computer doesn't have one, you should get a copy of an anti-virus software. Anti-Virus software is the easiest and most effective way of fighting viruses. If you are running Microsoft office products, make sure that the Macro Virus Protection option is enabled and running. This will prevent all forms of the Melissa virus and any type of virus that starts when you begin a Microsoft program. The last way to ensure that you don't get computer viruses is to NEVER open an executable file that is delivered as an attachment within an email. Attachments with the extension .DOC, .WPD, .XLS, .JPEG, or .GIF are of no concern. If you see an attachment within an e-mail that has the extension .EXE, .COM, or .VSB, you need to realize that if you double click it, you are giving

the program all rights to execute itself. This is where some major damage can occur. It is best to leave these types of extensions alone and just delete them. Again, the easiest way to protect your computer from viruses is to have anti-virus software running on your computer. If you don't have that, never open an e-mail attachment that has the extension .EXE, .COM, or .VBS. That will reduce your risk of getting a virus on your computer.

Who to Contact if You Have a Computer Virus

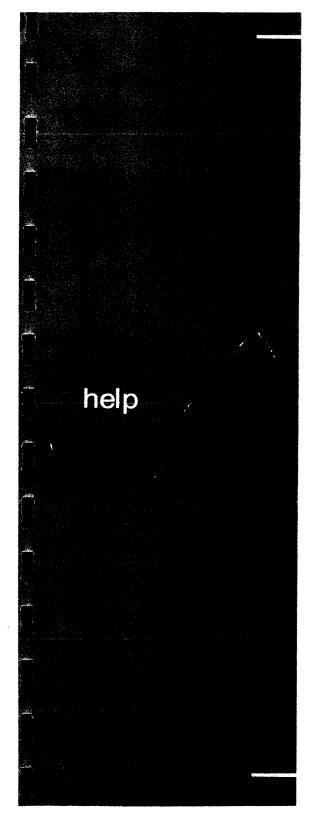
It is best to contact someone who knows about computers if you feel there might be a potential virus on your computer. If no one is around to help you, simply stop what you are doing, and tell someone when you have the opportunity. It is better to let someone who has some computer knowledge handle the situation than to try and figure it out yourself.



- 1. Explain what a cookie is and how it could potentially help you when you are surfing.
- 2. What is the easiest way to protect your identity while on-ine?
- 3. Of all the potential scams on the Internet, into which one would you most likely fall? Why are you attracted to this scam and how can you protect yourself?
- 4. Visit one of the web sites listed in this chapter. Surf their pages and read about the Internet and fraud. What did you learn from this experience?







List of Helpful Web Sites

The listing of these web sites is to provide you with resources of information that can be of use to you. You will find a wealth of information contained within each of these sites. The web sites are arranged according to subject matter. A short overview of each site is given to help you determine those that are most beneficial to your needs.

Our Site and Other Legal Sites

This section of sites is to provide you with legal information. Please note that these sites are not intended to be legal advice sites, but rather a resource of legal information.

www.iowalegalaid.org - lowa Legal Aid Web site (ILAW). This is our site that aims at providing you with legal information. Our site will help you to know more about rights as they pertain to civil legal cases.

www.lsc.gov -This is the site of the Legal Services Corporation. It provides information about the programs across the country that provide legal help to low-income people.

www.freeadvice.com - This is a directory of legal resources for all categories of the law, including criminal law. The site offers you the ability to find a lawyer according to your geographic location and your legal problem. You can also find much information regarding the law and your rights as they pertain to legal problems.

www.abalawinfo.org - This site is developed and maintained by the American Bar Association and offers a wealth of information on topics that concern the individual. You will find information regarding the courts, your house, your job, and even criminal justice. This site is well maintained and easy to navigate.

www.nolo.com - nolo.com is a "law for all" site that has extensive information regarding all types of law and law-related issues. One area of the site that is useful is the Law Centers section that houses information regarding wills and estates, business law, divorce law, landlord and tenant law, bankruptcy, and even speeding tickets.

Job Sites

Job sites are directed at helping you locate a job in a specific location or by a specific skill set. These sites will provide you with information on how to find a job, how to interview for a job, and how to get a job.

www.state.ia.us/jobs - This site is sponsored by the lowa Work Force Development and provides a good listing of jobs according to type of job. You can also search the database of jobs according to county. This site offers listings for both full and part time jobs.

www.state.ia.us/government/wd/

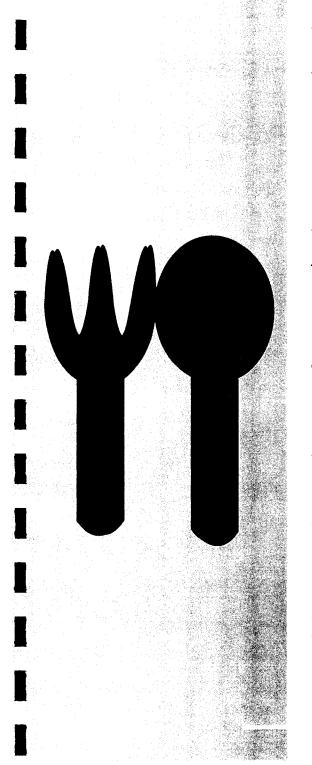
index.html - This is the state's job site, and provides a number of good opportunities for individuals seeking jobs. This site is also maintained and supported by the lowa Work Force Development. On this site you will find information regarding where to find the nearest work force development center, job listings, news releases and information that would be useful to individuals seeking a job. If you have a specific job in mind for which you would like to search, check out this site. You can also find information on workers' compensation.

www.desmoinesregister.com/jobs -

The Des Moines Register's site is full of job listings. You can browse listings according to job type on both a local and national level. You can also search the job databases according to a key word. One nice option at this site is the ability to post a resume and have employers contact you.

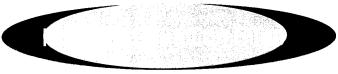
www.job-search-engine.com - This site is very unique and offers resources on the Internet for finding a job. This





isn't an actual job listing site, but a site that searches over 300 job listing sites and provides you with information about the jobs that are listed on these sites. Of all the job sites, this gets the highest rating.

www.flipdog.com - A very comprehensive job search site that is easy to use. This site has been rated as one of the best search sites on the Internet for job finding. The site is very graphical in nature and allows you to search by both keyword and category.



The aim of these sites it to provide you with information regarding living a healthy life style. You will be able to find all types of information regarding eating programs for children, as well as ways to improve your overall lifestyle.

www.fda.gov - This site provides good comprehensive information on not only food and nutrition, but also medicine and medical devices. You can find information on how to treat illnesses and even safety alerts.

www.os.dhhs.gov - This site is sponsored by the Department of Health and Human Services. Information on this page is broken down into many different categories and is accessible through a drop-down menu. Some of the topics include adoption, childcare, family assistance, and women's health.

www.cspinet.org - This site is maintained by the Center for Science in the Public Interest and focuses on improving the health, safety, and nutritional quality of our food supply and on reducing carnage caused by alcohol consumption. You will find many links to health, nutrition, food safety, and even nutrition quizzes.



These sites have already been covered in the Internet Guide. They will allow you to access information on any topic on the Internet.



www.google.com www.yahoo.com www.webcrawler.com www.hotbot.com www.altavista.com



This is a comprehensive list of web sites that do not fit into any of the other categories. You will find a wide variety of information contained on these web sites. Although very specific in nature, these web sites cover a lot of different information.

www.seniors.gov - This site is directed toward senior citizens and has a variety of information ranging from information on consumer protection, health, legislation, education, training, and retirement planning. A nice aspect of this site is that it also has a drop-down menu that will allow you to access other federal portals, including disabilities organizations, and other federal sites.

www.state.ia.us/government/dhr/caa

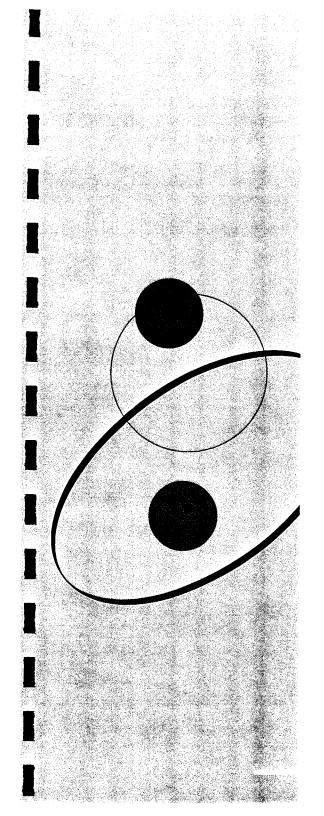
- This is the lowa site for Community Action Agencies. You can search the page through their search engine and find information on energy assistance and community services.

www.disabilitytraining.org - This site is dedicated to providing information for individuals with disabilities. On this site you will find a calendar listing conferences, continuing education workshops, and dates of speaking events. This site also has articles on disabilities, as well as a Disability Resource Library.

www.state.ia.us/elderaffairs - The Department of Elder Affairs in Iowa provides information to the public concerning issues related to Iowans 60 years of age and older. Within this site there is a section devoted to public information. This section has a calendar of events, recent press releases, and fact sheets directed towards senior citizens. You can also find a listing of the Area Agencies on Aging within the state at this site.







www.hud.gov - This is the National site for Housing and Urban Development. This site is directed toward individuals who are either participants in HUD or those who are thinking about using HUD's services. You can find information on renting, buying, and selling a house. This site also has a listing of HUD highlights, allows you to file a housing discrimination complaint online, and talk to a HUD counselor.

www.energy.gov - This is the U.S. Government's site for the Department of Energy. This site contains information on current energy bills, tips on controlling the amount of energy you use and other information regarding health and energy.

www.nls.org/natmain.htm - This is the site for the National Assistive Technology Advocacy Project. You can find information on cases, special education, articles, legal research links, and information on social security programs and work incentives. You can find a wealth of information that pertains to assistive technology.

This section of web sites is aimed at providing you with information on current



welfare issues. You will be able to find programs for those needing help and issues relating to poverty law.

www.frac.org - The Food Research and Action Center provides a nice list of all the food programs available to individuals. The site provides information on food programs and projects to help end hunger.

www.wnylc.com - Western New York Legal Services web site that provides good information on poverty law and an extensive list of court cases and rulings.

www.povertylaw.org - This site has a lot of information on legal research regarding poverty law.

www.welfarelaw.org/links.html - Good listing of national organizations and advocacy group web sites. This site also has some really good information on your rights concerning welfare law.

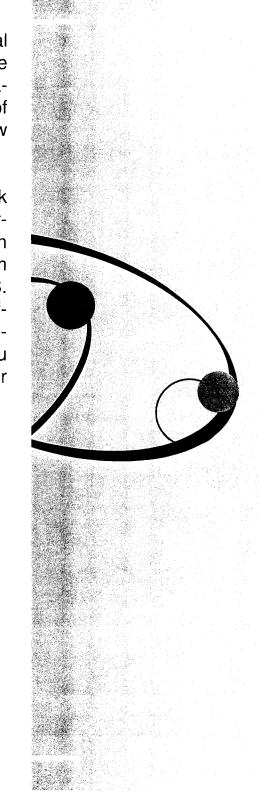


www.childrensdefense.org - This site provides technical assistance, public education, policy research and advocacy in a variety of areas affecting children. You can also find information on the Children's Health Insurance Fund and the Parent Resource Network.

www.aap.org - This is the site for the American Academy of Pediatrics which contains a member listing that promote the health, safety, and well-being of infants. You can also find a schedule of when a child should see a physician and what type of treatment they should receive.

www.nmchc.org - This is the National Maternal and Child Health Clearinghouse web site that distributes educational material on issues pertaining to the health of mothers and children. You can also view their clearinghouse publications.

www.merck.com - The Health Infopark is a wonderful resource for health information concerning a wide variety of health related issues. These issues range from aging, to heart disease, to HIV and AIDS. This site is very comprehensive and offers much information that could potentially be of use. If you don't find what you are looking for, you can look through their nice list of links to other resources.





4. What did you like about the Guide? Tell Us What You Think of the Guide You can help us make the Guide better by telling us what you think of it. Please take a minute to answer the questions below and return them to: Internet Guide, c/o Legal Services Corporation of Iowa, 1111 9th Street, Suite 230, Des Moines, Iowa 50314. 1. Before reading the Guide, how comfortable were you using the Internet? (Circle one) Not comfortable Somewhat comfortable Very comfortable 5. What suggestions do you have that 2. After reading the Guide, how comfortable are you in using the would make the Guide more useful? Internet? (Circle one) Not comfortable Somewhat comfortable Very comfortable 3. Please let us know which chapters of the Guide were most useful. Useful Not Useful Chapter 1: Start Here Chapter 2: The Internet and the WWW Chapter 3: Surfing and Search Engines Chapter 4: E-Mail

Chapter 5: Internet Security
The List of Helpful Web Sites

Test Your Knowledge

Thank you.

fold here

Internet Guide Legal Services Corp. of Iowa 1111 9th Street, Suite 230 Des Moines, IA 50314-2527

fold here

PRINTED AND DISTRIBUTED JULY 2002 BY LEGAL SERVICES CORPORATION OF IOWA

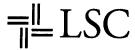
No part of this booklet may be reproduced without written permission of the publisher. Send requests for use of this material to the address given below.

A text only version of this booklet will be on the lowa Legal Aid web site (www.iowalegalaid.org).

Organizations and individuals who are committed to aiding the public in gaining knowledge of and access to the Internet for non-commercial purposes may adapt the text version of this booklet without permission, as long as the following attribution is included:

Adapted from the Low-Income lowans Guide to the Internet - a publication of the Legal Services Corporation of lowa.

For Additional Copies, Contact:
Legal Services Corporation of Iowa
1111 9th Street, Suite 230
Des Moines, Iowa 50314-2527
(515) 243-2151 (Voice and TDD)
1-800-532-1275 (Voice and TDD)
Later this year look for our web site at www.iowalegalaid.org



© 2002 Legal Services Corporation of Iowa
Designed by Candice Riggins of Bad Kitty Design

